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MICROSOFT CORPORATION  
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REDMOND, WA 98052

EXAMINER
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LIN, SHEW FEN

ART UNIT	PAPER NUMBER
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2166

NOTIFICATION DATE	DELIVERY MODE
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08/24/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/607,054	<b>Applicant(s)</b> PRABU ET AL.	
	<b>Examiner</b> SHEW-FEN LIN	<b>Art Unit</b> 2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-18, 20-24, 26-34, 36, 37 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-18, 20-24, 26-34, 36, 37, and 39-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

- a. This action is taken to response to Request for Continued Examination filed on 6/18/2009.
- b. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.
- c. Claims 1-8, 10-18, 20-24, 26-34, 36, 37, and 39-43 are pending. Claims 1, 2, 4, 13, 15, 21-23, 27, 31, 36, 37, 39, 40, and 42 have been amended. Claims 9, 19, 25, 35, and 38 have been canceled. Claims 1, 13, 22, 27, 36, and 39 are independent claims.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 18, 2009 has been entered.

### ***Claim Objections***

Claims 29 and 30 recite the limitation "the job representation". There is insufficient antecedent basis for the limitation in the claims.

***Claim Rejections – 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 39-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 39 recites a system, however, the use of various components and elements that would be reasonably understood by one of ordinary skill in the art to mean software, software based component implementation, or an abstract concept based on software. Examples of components and concepts used in the claim are “a controller” and “a network boot service” and other such terms that are interpreted to mean abstract concepts and software implementations. Furthermore, instant specification (page 27, line 10, the process of Fig 8 is performed by controller 122 of Fig. 2, and may be implemented in software...) also provides intrinsic evidence to be interpreted as software. Since a computer program is merely a set of instructions capable of being executed by a computer without the necessary physical articles or objects to constitute a machine or a manufacture and do not fall within a statutory category of invention.

Regarding claims 40-43 depend from rejected claim 39, comprise the same deficiencies as those claims directly or indirectly by dependence, and are therefore rejected on the same basis.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-8, 10-13, 15-18, 20-24, 26-34, and 36-37 are rejected under 35  
U.S.C. 102(e) as being anticipated by Denby et al. (US Patent 6,976,062, hereinafter Denby).

**As to claim 1, Denby discloses a method, implemented in a device (Fig. 1), the method comprising:**

**obtaining a task sequence at the device that describes a set of one or more steps to be carried out in managing multiple additional devices concurrently** (col. 7, lines 14-34, The parameter list in the upgrade.ini file controls the upgrade behavior, col. 11, line 58 to col. 13, line 15, upgrade.ini file typically contains tags and parameter definitions, the parameters will be used to select the sections of the upgrade that need to be performed, col. 2, lines 8-9, initiate simultaneous upgrades to multiple target devices);

**generating a job tree at the device representing the set of one or more steps** (col. 7, lines 27-45, col. 11, line 58 to col. 13, line 15, the parameters will be used to select the sections of the upgrade that need to be performed, which are the job tree being performed by upgrade), **the set of one or more steps comprising at least one of:**

**configuring firmware of the multiple additional devices** (col. 2, lines 23-28, col. 2, line 66 to col. 3, line 6, upgrade the operating system, firmware, applications and data files);

**downloading an operating system to the multiple additional devices** (col. 2, lines 16-18, install a new version of the operating system);

**rebooting the multiple additional devices** (col. 7, lines 14-18, 24-25, The rebooting and process control is done automatically); **or**

**configuring the operating system of the multiple additional devices** (col. 2, lines 8-9, col. 3, lines 33-35, col. 4, lines 10-16, col. 14, line 60 to col. 15, line 3, col. 19, lines 37-39, A new config.sys and startup.cmd will be copied over the old so that when the DCS 300 reboots); **and**

**sending one or more commands configured to carry out the set of one or more steps in accordance with the job tree** (col. 7, lines 24-59, col. 11, line 25-26, col. 17, lines 46-56, start upgrade from the GUI by calling upgrade utility).

**As to claim 2**, Denby discloses the method as recited in claim 1, wherein the set of one or more steps includes steps for automatically deploying an operating system on the multiple additional device (col. 2, lines 16-18).

**As to claim 3**, Denby discloses the method as recited in claim 1, wherein carrying out the set of one or more steps comprises:

carrying out a first step of the set of one or more steps (col. 11, lines 5-13); and carrying out the remaining steps of the set of one or more steps only if the first step is completed successfully (col. 11, lines 5-13).

**As to claim 4**, Denby discloses the method as recited in claim 1, wherein carrying out the set of one or more steps causes the device to have firmware on the multiple additional device configured (col. 2, lines 23-28, col. 2, line 66 to col. 3, line 6, upgrade the operating system, firmware, applications and data files) and an operating system to be deployed on the multiple additional device (col. 2, lines 16-18, install a new version of the operating system).

**As to claim 6**, Denby discloses the method as recited in claim 1, wherein one of the steps comprises another task sequence (col. 20, lines 48-52, reboot step comprises sequence of saving and rebooting system).

**As to claim 7**, Denby discloses the method as recited in claim 1, wherein one of the steps comprises an operation to be performed (col. 7, lines 27-34).

**As to claim 8**, Denby discloses the method as recited in claim 1, wherein the job tree comprises a parent node corresponding to the job and one or more child nodes (col. 7, lines 27-34, is a tree of sequential step nodes for upgrade), wherein each child node corresponds to one of the one or more steps (col. 7, lines 27-34, where a tree of sequential step nodes upgrade in which each step is a child node of its preceding step).

**As to claim 10**, Denby discloses the method as recited in claim 1, wherein the task sequence comprises a user-defined task sequence (Fig. 2, col. 11, lines 63-64).

**As to claim 11**, Denby discloses the method as recited in claim 1, wherein the task sequence comprises a user-selected task sequence (Fig. 2, col. 6, lines 54-55, col. 11, lines 63-64).

**As to claim 12**, Denby discloses the method as recited in claim 1, further comprising recording the set of one or more steps in a log (col. 15, lines 46-63, col. 17, lines 12-15).

As to claim **13**, is directed to a computer readable medium (Col. 4, lines 3-6) carrying instructions for performing the methods of claim 1 therefore rejected along the same rationale.

As to claims **15-18 and 20-21**, are directed to a computer readable medium carrying instructions for performing the methods of claims 2-3, 6-8, 12 respectively and are therefore rejected along the same rationale.

**As to claim 22**, Denby discloses **a method, implemented in a device (Fig. 1), the method comprising:**

**obtaining a user-defined task sequence at the device that describes an action to be carried out in managing multiple additional devices concurrently** (col. 7, lines 14-34, The parameter list in the upgrade.ini file controls the upgrade behavior, col. 11, line 58 to col. 13, line 15, upgrade.ini file typically contains tags and parameter definitions, the parameters will be used to select the sections of the upgrade that need to be performed, col. 2, lines 8-9, initiate simultaneous upgrades to multiple target devices);



**converting, at the device, the user-defined task sequence to a set of one or more steps of a job to be carried out in managing the multiple additional devices** (col. 7, lines 27-45, col. 11, line 58 to col. 13, line 15, the parameters will be used to select the sections of the upgrade that need to be performed which are the job tree being performed by upgrade), **the set of one or more steps comprising at least one of:**

**configuring firmware of the multiple additional devices** (col. 2, lines 23-28, col. 2, line 66 to col. 3, line 6, upgrade the operating system, firmware, applications and data files);

**downloading an operating system to the multiple additional devices** (col. 2, lines 16-18, install a new version of the operating system);

**rebooting the multiple additional devices** (col. 7, lines 14-18, 24-25, The rebooting and process control is done automatically); or

**configuring the operating system of the multiple additional devices** (col. 2, lines 8-9, col. 3, lines 33-35, col. 4, lines 10-16, col. 14, line 60 to col. 15, line 3, col. 19, lines 37-39, A new config.sys and startup.cmd will be copied over the old so that when the DCS 300 reboots); and

**sending one or more commands configured to carry out the one or more steps of the job** (col. 7, lines 24-59, col. 11, line 25-26, col. 17, lines 46-56, start upgrade from the GUI by calling upgrade utility).

**As to claims 23-24 and 26**, have the same subject matter as of claims 2-3 and 8 respectively and are rejected under the same rationale.

**As to claim 27**, is directed to a computer readable medium (col. 4, lines 3-6) carrying instructions for performing the methods of claim 1 therefore rejected along the same rationale.

**As to claim 28**, has the same subject matter as of claim 10 and is rejected under the same rationale.

**As to claim 29**, Denby discloses the one or more computer readable media as recited in claim 27, wherein the job representation comprises a tree having a plurality of nodes (col. 7, lines 27-34, is a tree of sequential step nodes for upgrade), wherein each of the one or more elements for each step is represented by one of the plurality of nodes (col. 7, lines 27-34, where a tree of sequential step nodes upgrade in which each step is a child node of its preceding step).

**As to claim 30**, Denby discloses the one or more computer readable media as recited in claim 29, wherein the job representation includes a one to one corresponding of elements to steps (col. 7, lines 27-34, where a tree of sequential step nodes for upgrade in which each step maps one to one corresponding a task being performed).

**As to claims 31-34**, are directed to a computer readable medium carrying instructions for performing the methods of claims 2-3, 6-7 respectively and are rejected along the same rationale.

**As to claim 36**, is directed to a system claim carrying instructions for performing the methods of claim 1 and is rejected along the same rationale.

**As to claim 37**, is directed to a system claim carrying instructions for performing the methods of claim 2 and is rejected along the same rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denby, as applied to claims 1 and 13 above, and further in view of Hsieh et al. (US Patent Publication 2002/0191014)

As to claim **5**, Denby discloses the method as recited in claim 1, but does not explicitly disclose wherein the task sequence is part of an Extensible Markup Language (XML) file.

Hsieh discloses the task sequence is part of an Extensible Markup Language (XML) file (paragraph 0044, the user interface 40 communicates with the gateway 38, which converts messages into the appropriate format. For instance, the gateway can convert SQL data messages from the database 32 into an XML (Extensible Markup Language) format which the user interface 40 then processes into a presentation format for display to the user).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Denby with the teachings Hsieh to communicate with device using XML format to install the upgrade across a wide range of product characteristics (Denby, col. 1, lines 41-46).

**As to claim 14**, is directed to a computer readable medium carrying instructions for performing the methods of claim 5 therefore rejected along the same rationale.

Claims 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denby et al. (US Patent 6,976,062, hereinafter Denby) in view of Pierre-Louis et al. (US Patent Publication 6,421,777, hereinafter Pierre-Louis)

**As to claim 39**, Denby discloses **a system (Fig. 1) comprising:**  
**a controller, configured to be implemented at least in part by at least one of one or more processors to obtain a task sequence that describes one or more steps to be performed on**

**multiple remote devices concurrently** (Fig. 1, 101, upgrade utility [controller], col. 4, lines 42-61, the upgrade utility 101 examines the ADC device platform 105 for its characteristics pertinent to the upgrade. Alternatively, the upgrade utility 101 may consult the database 106 for pertinent ADC device platform characteristics, col. 7, lines 14-34, The parameter list in the upgrade.ini file controls the upgrade behavior, col. 11, line 58 to col. 13, line 15, upgrade.ini file typically contains tags and parameter definitions, the parameters will be used to select the sections of the upgrade that need to be performed, col. 2, lines 8-9, initiate simultaneous upgrades to multiple target devices), **and to generate a job representation of the one or more steps** (col. 7, lines 27-45, col. 11, line 58 to col. 13, line 15, the parameters will be used to select the sections of the upgrade that need to be performed, which are the job being performed by upgrade), **the one or more steps comprising at least one of:**

**configuring firmware of the multiple remote devices** (col. 2, lines 23-28, col. 2, line 66 to col. 3, line 6, upgrade the operating system, firmware, applications and data files);

**downloading an operating system to the multiple remote devices** (col. 2, lines 16-18, install a new version of the operating system S);

**rebooting the multiple remote devices** (col. 7, lines 14-18, 24-25, The rebooting and process control is done automatically); **or**

**configuring the operating system of the multiple remote devices** (col. 2, lines 8-9, col. 3, lines 33-35, col. 4, lines 10-16, col. 14, line 60 to col. 15, line 3, col. 19, lines 37-39, A new config.sys and startup.cmd will be copied over the old so that when the DCS 300 reboots); **and**

**a network boot service, configured to be implemented at least in part by at least one of the one or more processors to detect when the multiple remote devices are coupled to a**

**network that the system is also coupled to, and to communicate with the controller to determine which of the steps of the job representation are to be carried out in response to the detection** (Fig. 1, col. 4, lines 17-61, upgrade utility and ADC devices are communicated through network, col. 4, lines 42-61, the upgrade utility 101 examines the ADC device platform 105 for its characteristics pertinent to the upgrade), but does not explicitly disclose a network boot service to detect the multiple remote devices.

Pierre-Louis discloses a network boot service to detect the multiple remote devices (Figs. 1, 4, item 104, col. 3, lines 3-5, server 104 provides data, such as boot files, operating system images, and applications to clients 108-112, col. 5, lines 9-15, track [detect] the remote system's reboots, determine the state of the client computer, determine the appropriate boot image for the current state, switch the boot image when necessary so that right boot image is downloaded to the remote client system at the next boot request).

Therefore, it would have been obvious to one skilled in the art at the time of the present invention to modify the method of Denby to include remote boot services as taught by Pierre-Louis to effectively manage and upgrade remote devices connected to a network (col. 1, lines 43-64).

**As to claim 40**, Denby discloses the system as recited in claim 39, wherein the one or more steps includes steps for automatically deploying an operating system on the remote device (col. 2, lines 16-18).

**As to claim 41**, Denby discloses the system as recited in claim 39, wherein one of the steps

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comprises another task sequence (col. 20, lines 48-52, reboot step comprises sequence of saving and rebooting system).

**As to claim 42**, Denby discloses the system as recited in claim 39, wherein one of the steps comprises an operation to be performed on the remote device (col. 2, lines 14-15, Allow for upgrades to occur from remote, centralized locations).

**As to claim 43**, Denby discloses the system as recited in claim 39, wherein the job representation comprises a tree having a plurality of nodes, and wherein each of the one or more steps is represented by one of the plurality of nodes (col. 7, lines 27-34, is a tree of sequential step nodes for upgrade).

### ***Response to Amendment and Remarks***

Applicant's arguments have been fully and carefully considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shew-Fen Lin /S. L./  
Examiner, Art Unit 2166  
August 8, 2009